IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No. : 10/784,138   Examiner : Minh-Chau N. Nguyen
Filed   : February 20, 2004   Conf. No. : 5357
Title   : ESTABLISHING A VIRTUAL TUNNEL BETWEEN TWO COMPUTER
              PROGRAMS

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Please consider the references listed on the enclosed PTO-1449 form. Items of non-patent literature are enclosed.

The invention disclosure form for this application contained the following text:

1 Background

1.1 Problem

Many products have diagnostic tools or applications that communicate with that product. When products are distributed at customer sites, there is no way to use these tools except to send a service tech onsite to diagnose and repair the problem. This invention allows connection between applications such as diagnostic tools and the products they connect with over the internet without compromising security.

1.2 Prior Solutions

There are HTTP tunneling solutions that tunnel protocols through the Internet to a site. This requires a server at each site that provides access to applications behind its firewall. Since this requires administration and maintenance at each site, it places the burden on end users or customers. Each site will have a server that translates the tunneled protocol into a local protocol. There are no standards in this area, so each server product will have different application support and security.

Installing a server at each site that may provide tunnel access to a protocol also has security risks. The server is addressable on the internet, and as such becomes a target to break in to the network.

1.3 Limitations of the prior solutions

If an organization needs access to many sites with a common set of tools, security, and application support, a centralized server is needed. The present invention serves this purpose.

3 Relevant Art

Message Queue products allow two applications to exchange information through a central MQ server. The applications typically exchange business data. The use of a MQ to pass data behind firewalls to simulate a direct communication path is novel. Also, the security policy that controls access to a communication path is novel.

HTTP tunneling of other protocols is common. A protocol is wrapped in HTTP and sent to a server. The server takes the body of the HTTP command and passes it on as its native protocol. The effect is that the communication path is transparently transported over HTTP. This is different from the invention because each tunnel is point to point. The client must be able to connect directly to a server. This requires many independent servers.

There are internet based products that do conferencing, screen sharing, and other applications (Webex, Experticity, Placeware). These products use a central server to exchange data between clients. The difference is that each application shares its unique protocol with a peer. For example, screen sharing applications send screen pixel information and mouse and keyboard events. They do not

This statement is being filed along with an RCE. Accordingly, no fee is believed to be due. However, if any fee is due, please apply it to Deposit Account No. 06-1050.

Respectfully submitted,

Date: Monday, March 15, 2010   /Paul Pysher/

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